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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,343	12/09/2003	Michael W. Anderson	1870-339	3542
757	7590	08/12/2005	EXAMINER	
BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			GROUP, KARL E	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/731,343	ANDERSON, MICHAEL W.
	<b>Examiner</b>	<b>Art Unit</b>
	Karl E. Group	1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1,6-8 and 12 is/are rejected.
- 7) Claim(s) 2-5,9-11 and 13-19 is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3-21-05.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_.

5027X

***Information Disclosure Statement***

1. The information disclosure statement filed 3-21-05 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1,6,7,8,12 are rejected under 35 U.S.C. 102(b) as being anticipated by Shaw (5,900,382).

Shaw teaches a refractory binder system including a silica sol. Example 10 includes 3 parts zircon flour, 4 parts china clay (aluminosilicate) and 2 parts silica sol. Furthermore magnesia is added (column 2, lines 46-60). The claims are considered anticipated.

4. Claims 1,6,8,12 are rejected under 35 U.S.C. 102(b) as being anticipated by Schulz (4,212,680).

See composition C which includes mullite, zircon and 6 wt% silica sol. The claims are considered anticipated.

5. Claims 1,6,8,12 are rejected under 35 U.S.C. 102(a or e) as being anticipated by Guigonis et al (2004/0266604).

Guigonis et al teach a refractory composition for glass manufacturing including AZS (alumina, zirconia, silica) and w wt% silica (see examples 1-4). The claims are considered anticipated.

***Allowable Subject Matter***

6. Claims 2-5,9-11,13-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record fails to teach or fairly suggest the specific contents of the constituents as set forth in the dependent claims.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl E. Group whose telephone number is 571-272-1368. The examiner can normally be reached on M-F (6:30-4:00) First Friday Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Karl E Group  
Primary Examiner  
Art Unit 1755

Keg  
8-5-05

Application No. 10/633,893  
Amendment dated July 29, 2005  
Reply to Office Action of April 29, 2005

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

*DO NOT ENTER 8/9/05*  
1. (Currently Amended) A glass composition comprising the following glass ingredients:

62.5 to 75 % by weight of SiO<sub>2</sub>;

1 to 16% [[20 %]] by weight of Al<sub>2</sub>O<sub>3</sub>;

an amount of B<sub>2</sub>O<sub>3</sub> sufficient to change the fusibility of the glass composition but not more than [[0 to]] 8 % by weight [[of B<sub>2</sub>O<sub>3</sub>]];

SiO<sub>2</sub> + Al<sub>2</sub>O<sub>3</sub> + B<sub>2</sub>O<sub>3</sub> accounting for 80.4 to 90 % by weight;

a total of 0 to [[20]] 15% by weight, zero inclusive, of R<sub>2</sub>O compounds, where R = Li, Na, and K; and

a total of 0 to 15 % by weight, zero inclusive, of TiO<sub>2</sub> + ZrO<sub>2</sub> + Ln<sub>x</sub>O<sub>y</sub>, where Ln<sub>x</sub>O<sub>y</sub> represents at least one compound selected from the group consisting of lanthanoid metal oxides, Y<sub>2</sub>O<sub>3</sub>, Nb<sub>2</sub>O<sub>5</sub>, and Ta<sub>2</sub>O<sub>5</sub>.

2. (Original) A glass composition as claimed in claim 1, further comprising the following glass ingredients:

a total of 12 % or less by weight of one or two or more R'O compounds, where R' = Mg, Ca, Sr, Ba, and Zn.

3. (Currently Amended) A glass substrate formed of a glass composition comprising the following glass ingredients:

62.5 to 75 % by weight of SiO<sub>2</sub>;

1 to [[20]] 16% by weight of Al<sub>2</sub>O<sub>3</sub>;

an amount of B<sub>2</sub>O<sub>3</sub> sufficient to change the fusibility of the glass substrate but not more than [[0 to]] 8 % by weight [[of B<sub>2</sub>O<sub>3</sub>]];